CLAIMS:

1. A multi-stack optical data storage medium for recording using a focused radiation beam having a wavelength λ and entering through an entrance face of the medium during recording, comprising at least:

- a first substrate with present on a side thereof:
- a first recording stack named L_0, comprising a recordable type L_0 recording layer, and a first reflective layer present between the L_0 recording layer and the first substrate,
- a second substrate with present on a side thereof:
- a second recording stack named L_1 comprising a recordable type L_1 recording layer having a thickness t_{RL1} and a complex refractive index $n_\lambda - i*k_\lambda$ at the wavelength λ, a second reflective layer present adjacent the L_1 recording layer at a side most remote from the entrance face, and said second recording stack L_1 being present at a position closer to the entrance face than the L_0 recording stack,
- a spacer layer, transparent for the radiation beam, sandwiched between the recording stacks, said transparent spacer layer having a thickness substantially larger than the depth of focus of the focused radiation beam,

characterized in that the second reflective layer mainly comprises the metal Cu and has a thickness t_{MLn} selected from the range of 8 - 20 nm and the thickness t_{RL1} and k_λ of the recordable L_1 recording layer fulfils the formula $t_{RL1}*k_\lambda \leq 8$ nm.

2. A multi-stack optical data storage medium according to claim 1, wherein the recordable type L_1 recording layer comprises an organic dye.

3. A multi-stack optical data storage medium according to claim 2, wherein t_{RL1} is selected from the range of 70 – 125 nm.

4. A multi-stack optical data storage medium according to claim 2, wherein a first auxiliary layer, transparent for the radiation beam and with a thickness smaller than 15 nm, is present sandwiched between the second reflective layer and the spacer layer.

5. A multi-stack optical data storage medium according to claim 2 or 4, wherein a second auxiliary layer, transparent for the radiation beam and with a thickness smaller than 15 nm, is present sandwiched between the second reflective layer and the L_1 recording layer.

6. A multi-stack optical data storage medium according to claim 4 or 5, wherein the auxiliary layer comprises a material selected from the group of oxides and nitrides of silicon.

7. Use of an optical data storage medium as claimed in any one of the preceding claims for multi stack recording wherein the second recording stack L_1 has a reflectivity level of more than 18% and a transmission level of more than 50%.